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DELIVERED ELECTRONICALLY

August 5, 2021

Ms. Karen Tyler, Esq.
University of Vermont Medical Center
111 Colchester Ave.
Burlington, VT 05401

RE: Docket No. GMCB-010-21con, New Philips Ingenia Elition 3.0 T X MRI and construction of an Addition to House the MRI at 192 Tilley Drive in South Burlington Project Cost: $4,080,192.

Dear Ms. Tyler:

Thank you for the application for the above referenced project. As we require additional information to complete our review of this project, please respond to the requested information below.

HVAC:

- Schematic Design Narrative
    1. New MRI Installation
        a. Delineate design criteria (temp/humidity range) for the space.
        b. Delineate ACH rates and filtration for each area.
        c. Explain whether any measures be implemented specifically to address COVID concerns.
        d. Describe how the upper humidity limit will be maintained.
        e. It is noted that there is a humidifier provided to maintain the lower limit. Confirm this is a clean steam humidifier.
        f. Describe how outside air will be treated when system fan coils are not in heating/cooling mode.
        g. Confirm that domestic water-cooling backup is approved by local water authority.

Electrical:

- Schematic Design Narrative
    - There is no mention of an on-site emergency generator or tie-in. Explain whether there is an on-site generator and does it have the capacity to support the new MRI?
    - It is unclear what equipment will be tied into the proposed "Critical" and "Life Safety" electrical branches. Provide clarification as to whether the system will be provided with a "Non-Essential" emergency backup power branch.
    - Clarify whether the "Critical" & "Life Safety" equipment will be 2-hour rated. Will it include two-hour rated mineral insulated cable?
    - Clarify whether there are receptacles for computer (PC) loads.
    - Article 517.41(e), of the "National Electric Code", (NEC) requires receptacle to have a distinct color and/or illuminated outlets. Please clarify the location of these receptacles and how they will be distinguished.
    - Clarify the use of hospital grade MC type cable and device installations, section (a.)(iv.) Clarify whether hospital grade type cable will be used as UVMMC has stated that it "may" be used.
    - Clarify the use of different colors & markings to provide clear indication between normal/emergency/critical receptacles, wiring, conduit & junction boxes.
    - Clarify the color coding of the fire alarm wiring system.
    - Clarify the labeling of all receptacles, switches, electrical switchgear, etc.

Fire Protection:

- Schematic Design Narrative:
    - Confirm that new sprinklers will have the same response time index (RTI) as existing sprinklers.
    - Verify that all new sprinklers shall be "dust-proof" hospital type specifically manufactured for MRI units. Confirm that all sprinkler components and piping in MRI room shall be of non-ferrous material.
    - Verify if sprinklers are required above ceiling spaces.
    - Verify from a current flow test that adequate pressure has been provided to comply with the pressure and flow requirements as outlined in NFPA for the furthest most remote sprinkler zone.
    - Confirm with local Fire Marshal's office requirements for pressure and flow.
    - Confirm that new Pre-Action sprinkler system is a double-interlocked type system with approved/compatible ceiling detectors and releasing panel.

Plumbing:

- Schematic Design Narrative:
    - Verify that provisions have been provided to prevent Legionella bacterial growth in domestic hot water system.
    - Verify that medical gas systems conform to NFPA 99 (applicable edition).
    - Verify that the proposed medical gas outlets and valve boxes are compliant with the preferred type and manufacturer.
    - Verify that a third-party medical gas testing company will be included as part of the plumbing close-out requirements
    - Confirm adequate pressure and flow is available to provide the required flows and pressures.
    - Verify that adequate drainage will be provided for the discharge requirements for the new reduced pressure zone backflow preventer and Pre-Action sprinkler system.
    - Verify that anti-microbial flush valve and lavatory handles have been provided.
    - Verify which piping materials will be installed for each plumbing including medical air, medical oxygen and medical vacuum.
    - Verify that all medical gas piping will be medical grade and will have brazed fittings.
    - Verify if an emergency overflow roof drain system is required if the roof has parapets.
    - Verify that the new sanitary waste and roof drainage lines will have adequate pitch and will meet the invert elevations of the existing sanitary waste and roof drainage piping systems. All sanitary waste systems shall be code compliant and properly vented.

In responding, restate the question in bold font and respond in unbolded font. Send an electronic copy to me at donna.jerry@vermont.gov and one hard copy (three-hole punched) with a Verification Under Oath to my attention at the Green Mountain Care Board, 144 State Street, Montpelier, Vermont 05602.

If you have any questions, please do not hesitate to contact me at 802-760-8162.

Sincerely,

s/ Donna Jerry
Senior Health Policy Analyst
Green Mountain Care Board

cc. Laura Beliveau
Staff Attorney